#### Winter 2003

# Back To The Future With The New Chesterfield, NH - Brattleboro, VT Bridge

You are not seeing double as you approach the Connecticut River on NH Route 9 in Chesterfield.

You are in fact looking at two steel arch bridges standing nearly side by side. The one on the right, the new one, just happens to be 67 years younger than its slightly smaller mirror image to the left.

When completed later this year, the new 430-foot long bridge will have a higher clearance and a wider 10-foot shoulder on a new alignment about 65 feet north of its predecessor, which was built in 1936.

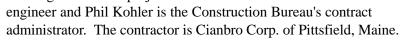
But the old bridge isn't going anywhere. Deemed as historically significant, the Red List structurally deficient bridge will stay standing, still serving as a link between Chesterfield, New Hampshire and Brattleboro, Vermont for bicyclists and pedestrians.



Construction work continues on the new Chesterfield, NH - Brattleboro, VT. Bridge (right) which looks like a bigger twin to the nearby 67-year old bridge it will replace later this year.

According to NHDOT project manager Don Lyford, the old bridge may one day be rehabilitated and pressed back into service for traffic if four lanes are eventually needed at that location. Lyford says construction on the new bridge has been going well so far. "The biggest challenge has been the soft ground on the New Hampshire side of the river," Lyford says. "The contractor had to put in quite a few friction piles."

Bob Juliano is the lead Bridge Design Bureau engineer on the project. Karen Gola is the construction



When completed later this year, the \$15.4 million bridge project will have motorists doing double takes for years to come.



#### Segway Visit A Big Hit With NHDOT Employees

Ellison Welch didn't plan to spend the day when the contract administrator for the Construction Bureau stopped by NHDOT headquarters with his New Hampshire-made Segway Human Transporter. But the line of curious employees anxious to check out Dean Kamen's invention kept growing, and hours later Ellie was still patiently giving anyone who wanted the opportunity to take a ride on the "world's first dynamically stabilized, self-balancing Human Transporter".

In the left photo, Kim Cahill (Construction Bureau) shows how easy the Segway is to ride after a quick lesson from Ellie.

Ellie Welch had the inside track on ownership because his wife Julie works for the company that produces it. The Segway is now on sale to the general public for about \$5,000.





# Commissioner's Corner by

Carol A. Murray

# Chocorua Lake: Becoming Part of the Resource Protection Solution

It's one of the most scenic views in New Hampshire. You're driving along New Hampshire Route 16 in Tamworth and there, not far from the road, is beautiful Lake Chocurua in the shadow of Mt. Chocorua.

It's that close proximity to the lake for about a mile that had those trying to protect the quality of the water concerned about the impact of runoff from Route 16.

Since 1978, volunteers monitoring the lake had become increasingly concerned about growing levels of phosphorous. Originating from a variety of sources, including fertilizer, detergents, gasoline and oil, phosphorous can accelerate the growth of algae and thus deteriorate water quality. About 75% of the phosphorous entering the lake was traced to the Chocorua River, with 15% attributed to storm run-off from Route 16.

Also discovered near Route 16 were sediment plumes from highway runoff that created new shallow areas where invasive plants were growing.

The Chocorua Lake Watershed Team, made up of state and federal agencies and local interested citizens, approached the NHDOT in search of a solution. Ken Kyle, the Highway Maintenance District 3 Engineer at that time, and his personnel worked with the watershed team on a "Berms and Swales Project".

This "Best Management Practice" approach involved installing a system of berms, swales, settling and filtering basins, to control storm run-off, improve safety and reduce noise.

The results of this cooperative effort have been dramatic. According to researchers from the University of New Hampshire, the amount of phosphorous entering Lake Chocorua along the eastern shore near Route 16 has been reduced by 82 percent!

As an indication of its success, the North American Lake Management Society recently recognized this project with a Technical Achievement Award.

On October 31, I joined the Chocorua Lake Association in signing a Memorandum of Understanding that pledges an ongoing cooperative relationship to protect the lake.

Under the historic agreement, the NHDOT pledges to continue "best management practices" in both maintenance and construction activities, to be sensitive to water quality issues, and to notify the lake association of meetings or projects affecting Route 16.

For its part, the Chocorua Lake Association will monitor the best management practices, provide annual water quality reports and attend any NHDOT meetings related to Route 16.

This success story is a great example of how a cooperative rather than an adversarial approach can yield positive results for New Hampshire. It also shows that transportation and environmental challenges and issues involving both the private and public sectors can lead to complementary solutions without compromising one or the other's goals.



Commissoner Murray signs the Memorandum of Understanding on October 31 for Lake Chocorua. Looking on are Bob Griffin (Chocorua Lake Association) and Ken Kyle, NHDOT Assistant Director of Operations.

Believed to be the first of its kind in New Hampshire, the agreement promises ongoing cooperation between the NHDOT and the Chocurua Lake Association to use best management practices to protect and maintain the quality of the lake near NH Route 16 in Tamworth.



#### Winter 2003

Governor	Craig Benson
Commissioner	Carol Murray
Assistant Commissioner	Gilbert Rogers
On the Move Editor	Bill Boynton

PRINTED ON RECYCLED PAPER



# New NHDOT "MATS" Activity Tracking System Promises Improved Efficiencies Pilot Program Underway In District 3 Well Received And Already Showing Potential Benefits

The idea that New Hampshire should be doing something similar came to "Butch" Knowlton on a plane ride home from Arizona. The NHDOT Director of Operations was returning from a national transportation conference and happened to be seated next to a counterpart from the Vermont Agency of Transportation who told him about Vermont's success with a maintenance activity tracking system.

Two years later that idea is becoming a reality with the development of an NHDOT Maintenace Activity Tracking System (MATS).

"It's a vital tool for performance measurement," Knowlton says. "The ability to extract data quickly will be invaluable to our management of personnel and equipment."

In partnership with Vermont and Maine, the NHDOT MATS effort is utilizing Highway



Bill Watson (MATS Project Manager), intern Lindsey Colburn and Lisa Chamberlin have been working to make the NHDOT's new Materials Resource Tracking System a reality.

Maintenance District 3 as its pilot project for the rest of the agency. All patrol facilities in District 3 now have networked computers and newly trained District 3 employees are busy entering data to test the software that will be used to improve efficiencies in such areas as payroll, tracking salt and sand supplies, and state and rental equipment. The MATS system will also generate all the cost information and reports necessary for reimbursement from the Federal Emergency Management Agency.

"We are 95% complete in District 3 and it's getting easier as we go along," says MATS project manager Bill Watson, who credits the NHDOT's Bureau of Information Technology Services with providing the hardware and software support necessary to make MATS work. Bill also says that after some initial skepticism in District 3, he believes the District 3 people using the system will ultimately be MATS biggest sales people after seeing how the computerized collection of maintenance-related information can be simpler and more effective.

"We had one patrol foreman who was initially convinced his #2 pencil was more efficient than any computer. Now he's one of the MATS program's biggest advocates. It's a real time assessment of people, equipment and materials. In the past if we wanted to come up with the cost of a snowstorm it would take four to six weeks of effort. With this system, we will have the answer the day after the snow stops falling."

District 3 Engineer Mark Morrill has been in favor of implementing MATS from the beginning and says he has encouraged his district to buy into it.

"I have had no problem with us being the guinea pigs," Morrill says. "There has been a learning curve, but everyone is beginning to see that it will help speed up the process of such tasks as time sheets and ordering fuel. We won't even know the full potential of MATS until we get into it even more."

#### What Will A Maintenance Activity Tracking System (MATS) Do For The NHDOT?

- A valuable tool to capture and track resources and estimate the unit cost and value of an accomplishment.
- Greater consistency and documentation of day-to-day NHDOT activities.
- Introduces technology (computers) to patrol facilities as another tool for maintenance employees.
- Provides the necessary computer skills training.
- Provides a single point of entry for employee daily time, activity and all maintenance-related work.
- Makes the collection of maintenance-related information simpler and more effective.
- Provides reporting capabilities for employees to see work reports and other information.
- The partnership with Maine and Vermont will help leverage software development costs.
- MATS will be extended to all of Operations and then throughout the Department.



Highway Maintenance

### Well Section Utilizing A Tiny Video Camera For Underground Inspections

It's smaller than a golf ball, but don't let it's size fool you. The new *GeoVision, Jr.* bore hole camera being used by the Well Section of the Highway Maintenance Bureau is proving to be a powerful and valuable tool for inspecting wells across the state.

By inserting the camera dozens of feet into a six-inch pipe, NHDOT Well Section personnel are now getting an amazingly clear picture of what may or may not be a problem below the surface of the earth.

"We are looking to make sure the drilled well is properly constructed and that the casing is properly sealed into the bedrock, thus sealing off surface water which can be a source of chloride contamination," says Will Campbell, a NHDOT Water Supply Engineer. "The camera eliminates the guess work that we were limited to with just a flashlight."

The three-person Well Section, which also includes Phil Huntley and Mike Dennis, handles an

average of 55 cases a year of potential well contaminations along the state highway system that may have been due to highway maintenance or a construction project.

NHDOT Water Supply Engineer Will Campbell holds the Well Section's new GeoVision, Jr. video camera which is lowered into wells for a clear picture of the situation of what's going on below the earth's surface.

With the full replacement cost of a new well averaging about \$12,500, the \$3,500 camera has already paid for itself several times over by clearly showing that one well being evaluated was improperly constructed, resulting in the investigation being dropped from the program.

### Assistant Commissioner Gil Rogers Announces His Retirement

After 39 years in the transportation business (30 with the NHDOT), Assistant Commissioner Gil Rogers has decided it's time to "create more leisure time". And that's just fine with his 9-year old daughter Elizabeth.

Gil will retire from the NHDOT on March 31 after three decades of work on projects that have shaped the transportation network in New Hampshire.

Recruited by the California Division of Highways out of UMass - Amherst, Gil Rogers answered an ad for turnpike expansion work in New Hampshire and returned to New England in the early 1970's to raise his family. He worked in the Bureau of Highway Design for 20 years before being promoted to Assistant Director of Project Development. In 2001, Gil was chosen to be the NHDOT's Assistant Commissioner and Chief Engineer.

While the many smaller projects he worked on were just as satisfying, Gil cites the design and construction of I-93 through Franconia Notch in the 1970's, working towards the completion of NH Route 101 from Candia to I-95 in the 1980's and the resolution of the Conway Bypass debate in the 1990's as three of the most memorable projects he was involved with.

Gil plans to remain active in the Town of Bow, where he serves on the Planning Board and "is keeping all options open" regarding his future. The only non-negotiable option, Gil says, "is that I will be playing more golf."



Gil Rogers



Bridge Maintenance

### Tests With "Cold Weather Concrete" Offer Potential Time and Money Savings

Imagine the possibilities if the construction season in New Hampshire could be extended year round. That's why the effort to develop a "cold weather concrete" is being welcomed as something worth pursuing.

"The potential for it is huge," says Kyle Fox, Maintenance and Construction Engineer for the NHDOT's Bureau of Bridge Maintenance.

"It could be a real money, materials and time saver because a normal winter concrete pour requires it to be housed and heated in order to properly cure."

The cold weather concrete product is being developed by researchers at the Cold Region

Research Laboratory (USA CRREL) in Hanover. It involves putting chemicals that act like anti-freeze into concrete to keep the water from freezing until the concrete cures to enhance both strength and durability.

"We are using chemicals as a substitute for heat," says Charles Korhonen, the USA CRREL lead engineer on the project. "The result is that the concrete acts as if it's warm in below freezing temperatures."

NHDOT Bridge Maintenance crew #4 participated in the most recent cold weather concrete pour for a bridge railing on NH Route 12A in Lebanon in December (photos at right). Bridge Maintenance crew #10 worked on an earlier bridge footing pour with the new product on NH Route 112 in Woodstock.

New Hampshire is one of ten northern states that have expressed interest in the product. Charles Korhonen says national standards are being considered and it may not be long before "cold weather concrete" becomes widely used.





#### Mechanical Services Bureau Adds Hybrid Honda Civics To NHDOT Fleet



Complete with the new NHDOT logo on the doors, one of the two new Honda Civic Hybrid sedans is ready for action out of the Mechanical Services central motor pool. The gasoline and electric powered vehicle gets an estimated 50 miles per gallon.

The NHDOT's fleet of vehicles fueled by something other than just gasoline continues to grow with the addition of two 2003 Honda Civic Hybrid sedans to the Bureau of Mechanical Services' central motor pool.

With an electric motor assisting a 1.3 liter gasoline engine, the Honda Hybrids get an estimated 50 miles per gallon and have a cruising range of between 500 and 600 miles on a tank of unleaded gasoline. The are also rated by the EPA as Ultra Low Emission (ULEV) Vehicles.

The NHDOT alternative fueled fleet includes four Honda Civic Compressed Natural Gas (CNG) sedans, one 15-passenger Dodge CNG van and one Solectria electric sedan.

A 1/2 ton CNG Ford pickup is on order.



## New Concrete Pump Helps Reach Difficult Locations For Bridge Work





NHDOT Bridge Maintenance crews have a new piece of equipment that is saving time and energy, and making their lives a little easier.

A new concrete pump is being used on projects across the state for placing concrete in areas otherwise inaccessible by concrete trucks. Previous alternatives included renting a pump and operator for a day, or moving the concrete the really hard way by using five gallon buckets or wheel barrows.

In the two left photos, Bridge Maintenance Crew 7 used the pump to place concrete inverts and sidewalls into two Red List multi-plate pipes. In the below photo, Crew 4 widened and overlayed an existing bridge deck in Plainfield.

On one project, a Bridge Maintenance crew was able to pump concrete a distance of 170 feet from the truck location.



# Bridge Maintenance Piscataqua River Vessel Security Team Receives Coast Guard Commendation For Service

The U.S. Coast Guard has recognized Members of two NHDOT Bridge Maintenance crews with a "Meritorious Team Commendation" for their work with 35 federal, state and local agencies in developing and implementing an Incident Action Plan for allowing the continued shipment of Liquified Petroleum Gas (LPG) into the Port of Portsmouth.

According to the citation, through a series of exhaustive planning sessions following the events of September 11, 2001, "a plan of action was developed to ensure safe commerce, including international coordination of intelligence, enforcement of 24-hour security zones, and boarding and hull inspections at sea of all LPG vessels."

# W.S. COAST GUARD

"The unprecedented increase in security measures were built upon the existing safety practices developed over a 25-year period."

"Through the unprecedented level of cooperation... over 265,000 metric tons of LPG was imported into the Port of Portsmouth without incident, ensuring that the critical energy supply for the region was not interrupted."

Representing the NHDOT in the effort were Bridge Repair Crew 15 (Gene Popien, Greg Miles, Jon Pridham, William Wyman, Ed Badeau, Normand Legere and Tom Hogan), and Hi-Level Bridge Crew 12 (Robert Spinney, Ken Morrison, Joseph DeRochement and Jonathan Asmund).

The NHDOT was also credited with helping to coordinate traffic management of the I-95 corridor.

#### **DEPARTMENT OF TRANSPORTATION**



# New Highway Maintenance Brochure Answers Often Asked Winter Questions

Editor's note: Winter weather always brings with it a slew of calls from customers about the NHDOT winter maintenance operations. Many are the same inquiries year after year, which prompted Highway Maintenance administrator Steve Gray to put together a brochure that responds to some of the most commonly asked questions.

# How does the New Hampshire Department of Transportation (NHDOT) prepare for winter?

The preparation begins in the summer when orders are placed and shipments start for the anticipated quantities of salt and sand needed for the upcoming season. Trucks and plows are inspected and repairs made as necessary. The number of plow trucks required are determined and private contractors are signed up to supplement state equipment. Training of employees in the latest methods of snow removal is also provided.

# During a snowstorm is it safe for me to be out driving around?

This depends greatly on your vehicle, driving skills, mental or physical condition, the need to be out and above all the type or intensity of the storm. The best advice is to call the toll free NH State Police Road Advisory Number @ 1-800-918-9993. Weather conditions as reported by NHDOT at various locations across the state can be found on theInternet at http://www.nhdot.com In most storms, it is recommended that travel be limited to essential trips only.

#### I am uncomfortable following slow moving snowplow trucks during a storm. Couldn't they go faster or pull over frequently to allow traffic to pass them?

Plow trucks travel at a speed necessary to safely perform the work. Following plow trucks too closely can be dangerous to you and the driver of the truck. Many times a snow cloud will be created behind the plow truck that can obscure your vision in addition to "hiding" your vehicle. Any emergency stops or turns by the plow truck could result in a rear end collision. It is safer for you to stay back and be patient. By pulling over, the truck would lengthen the time it would take to clear the roads plus you would be driving on a snow-covered road instead of a cleared one. Additionally the passing vehicle has a tendency to accelerate, which on a snow covered road could lead to loss of control and a potential head on crash with oncoming traffic.

#### I just get my driveway cleared and the snowplow comes by again and fills the end in again. How often is this going to happen?

During a storm we will continue to plow and treat the roads until cessation of the storm. A final run is made to push back the snow banks to prevent snowmelt from running onto the travel surface, provide more room for additional snow storage and increase sight distance and visibility.



# What materials does NHDOT use in performing snow and ice removal?

Salt (sodium chloride), sand and calcium chloride are all utilized in combating winter storms in New Hampshire. Salt is the principal deicer, as it has been proven to be the most cost effective deicer available. Sand enhances traction on hills and corners during a storm. Calcium chloride is used with salt in very cold storms to act as a trigger to start the formation of salt brine to aid in the deicing process.

#### Why is my road the last to get plowed?

NHDOT has classified all of its roads for priority work based upon the importance of the highway and traffic volumes. Plow routes are assigned to various trucks to comply with the Department's Snow & Ice Policy, which indicates the allowable snow accumulation on the road and the frequency of the plowing effort.

### During the last snowstorm the plow truck knocked over my mailbox, will the state repair/replace it?

Despite our precautions, plow trucks or the plowed snow can inadvertently strike or push over a mailbox. This usually occurs during periods of low visibility or during heavy snowfalls. The Department will not assume responsibility for repairs to those boxes located in our Right-of-Way. We will work with the homeowner to locate or design a mailbox system that will minimize snowplow damage.

# On multi-lane highways there are up to six plows in a row, why are there so many?

Plowing in echelon clears the snow from all the lanes at once, eliminating snow ridges that might be a hazard to motorists. If you encounter this, please stay back and do not attempt to pass among the plow trucks.





#### <u>NEW HIRES</u>

Christopher Carucci, Civil Engineer 3, Highway Design Everett Derrington, Highway Maintainer 1, District 1 Naresh Agrawal, Civil Engineer 2, Construction Steven Paisley, Survey Team Tech. 1, Highway Design Bryan Mika, Survey Team Aide, Highway Design Walter Hodgdon, Highway Maintainer 2, District 2 Marilyn Kenyon, Account Clerk 3, District 2 Gordon Day, Highway Maintainer 2, District 2 Gene Boynton, Highway Maintainer 2, District 3 Jennie Lu Hill, Radio Dispatcher, District 4 Brenda Harlow, Toll Attendant 1, Turnpikes Sandra White, Human Resources Assistant 2, Turnpikes Kevin James, Highway Maintainer 2, District 1 Sherry Brooks, Program Assistant 2, Municipal Highways Kirk-Patrick Caron, Engineering Aide 1, Right-of-Way Robert Yeaton, Sr., Highway Maintainer 2, Turnpikes Denis Boisvert, Civil Engineer 4, Materials & Research Richard Cahoon, Jr., Highway Maintainer 2, District 6 John Ankenbrock, External EEO Coordinator, Human Res. Ken Johnson, Technical Support Specialist 2, ITS Christopher Scanlon, Highway Maintainer 1, District 5 Marcie Wells, Secretary 2, Materials and Research Matthew Labrake, Engineering Tech 3, Trans. Planning Douglas Gamsby, Engineering Tech 3, Highway Design Del Cass, Bridge Maintainer 3, Bridge Maintenance James Burson, Highway Maintainer 2, District 6 Carl Wideberg, Clerk of the Works, Public Works Paul Coutu, Jr., Bridge Maintainer 1, Bridge Maintenance Nancy Cantwell, Secretary 2, Materials & Research Joseph Cain, Highway Maintainer 2, District 2 Andrew Guptill, Highway Maintainer 2, District 2 Martin Wilson, Auto Body Repair Tech., Mechanical Serv. Eric Thibodeau, Civil Engineer 4, Materials & Research Maurice Janelle, Welder Mechanic 1, Mechanical Services Richard Mechaber, Earth Scientist 2, Material.s & Research Donald Hall, Laborer, District 5 Dana Thompson, Bituminous./Concrete Plant Inspector,

Giselle Stewart, Secretary 2, Turnpikes
Stephen Smith, Highway Maintainer 1, Turnpikes
Lauren Bonisteel, Secretary 2, Right-of-Way
Thomas Scammon, Highway Maintainer 1, District 5
Gary Stevens, Bridge Maintainer 1, Bridge Maintenance
Frederick Wallace, Highway Maintainer 2, District 6
Christopher Barnes, Highway Maintainer 2, Turnpikes
George Pearce, Highway Maintainer 1, District 3
Deborah Duly, Information Center Attendant 1, Turnpikes
Anthony Rogers, Highway Maintainer 2, District 3
Lori Clare, Secretary 2, Road Maintenance
Jeannette Cunningham, Training Coordinator, Human Res.



Marcus John (Administrative Services) puts the finishing touches on hanging a new NHDOT banner at the entrance of the large conference room in the Morton Building. The Lobby Enhancement Committee headed the effort to have the banner.

#### **PROMOTIONS**

Steven Albrecht, Assist. Highway Patrol Foreman, District 2 Charles Dylyn, Jr., Highway Maintainer 3, District 5 Michael Pillsbury, CE 5 Project Manager, Mun. Highways Douglas Noyes, Highway Maintainer 3, District 3 Ernest Ball, Highway Maintainer 3, District 5

Materials & Research

Julie Seiger, SDS 4, ITS
Leo Gerrior, Tech Support Specialist 2, ITS
Ronald Weilnau, SDS 5, ITS
Ryan Lewis, Tech Support Specialist 3, ITS
Lisa Chamberlain, Technical Support Specialist 4,
Commissioners Office





# **SERVICE AWARDS**



# January through March 2003

#### 35 YEARS

David Reimers, Construction

#### 30 YEARS

Mitchell Gearwar, District 6
David Coffey, Bridge Design
Ira Holt, District 1
Daryl Woods, Fuel Distribution
Michael Dunlap, Traffic
Kenneth Hazeltine. Rail & Transit

#### 25 YEARS

Ken Giberson, District 3
Richard Atwood, District 3
David J. Brillhart, Commissioner's Office
Carl Hussey, Traffic
Suzanne Babula, Turnpikes
Barbara Novak, Turnpikes

#### 20 YEARS

Wayne Massey, Turnpikes Victor Dumont, Jr., Turnpikes Michael Gearwar, District 6

#### 15 YEARS

**Albert Soucy**, Mechanical Services Joseph Dorner, Jr., District 3 Darrell Johnson, Mechanical Services John Ine, Turnpikes Phillip Miles, Right-of-Way David Evans. District 5 Richard MacDonald, District 2 Robert Critchett, District 6 Christopher Sheehan, Public Works Craig Cleveland, Materials & Research Arthur Johnson, Materials & Research Craig Cormier, Highway Design John Gould, District 1 **Kevin Winn**, Construction Wildred Graves, District 3 Walter Dudley, Highway Design David Cloutier, Highway Design

#### 10 YEARS

Marc Brodeur, District 1
Thomas Clement, Bridge Maintenance
William Watson, Jr., Commissioner's Office
W. Douglas Scamman, Jr., Commissioner's Office
Margaret Savage, Turnpikes
Melvin Mattice, Transportation Planning
Harold Todd, District 5
Louis Kluntz, District 4
Alan Locke, District 1
Elizabeth Toner, District 4

#### <u>RETIREMENTS</u> (years of service)

Bruce Crowell, Highway Maintainer 2, District 6 (30)

**John Gooden**, Bridge Maintainer 3, Bridge Maintenance (27)

Robert Carlson, Drawbridge Operator, Bridge Maintenance (14)

Ronald Morton, Information Center Attendant 1, District 3 (11)

Judith Rancourt, Clerk 4, District 4 (35)

Catherine Carrier, Transportation Project Coordinator, Rail & Transit (37)

Wayne Bumps, Highway Maintainer 2, District 4 (17)

**Lester Collins**, Assistant Highway Patrol Foreman, District 1 (20)

**John Sullivan**, Drawbridge Operator, Bridge Maintenance (23)

Roberta Cuvellier, Toll Attendant 1, Turnpikes (30)

Paul Keddy, Highway Patrol Foreman, District 5 (34)

Bernard Lacoy, Jr., Storekeeper, Mechanical Garage (15)

Frank Trull, Drawbridge Operator, Bridge Maintenance (14)

Fred Murphy, Special Program Manager, Environment (33)



Transportation Planning

# Glenn Duffin's Family Receives A Swing Set And Good Will For Christmas Co-Workers Pitch In To Buy And Assemble The Play Set In The True Spirit Of The Season

Editor's note: Glenn Duffin passed away in a motorcycle accident this past June.

Thanks to the very generous contributions from many employees here at NHDOT, the children of Glenn Duffin now have a wonderful new swing set to play on.

With the money received during the bakesale, and the extra funds from the sale of NHDOT shirts, we were able to purchase a large wooden play set with swings, slides, play forts, sand box, and rope ladders.

Six of Glenn's former co-workers spent two days at the Duffin home in Danbury assembling the set.

I think the photo shows that the children are extremely pleased, and could not stop laughing and giggling as they played. Pat (Glenn's wife) wrote to say that they played on the set until almost 4:30pm.



Fundraisers and two days of work by six employees of Transportation Planning produced this impressive swing set for the Duffin Family. Pictured, from left to right, are: Wayne Cherrette, Bruce Farrington, Ed Sargent, Heather Duffin, Christopher Duffin, Dennis Fowler, Samantha Duffin, Mike Soper and Jim Taylor. The photo was taken by Pat Duffin.

Thank you all for helping to make this Christmas gift a reality, and a special thanks to the six folks that worked so hard in the cold to put it together.

Samantha, who has been taking saxaphone lessons since August, treated us to Christmas Carols on her sax while we finished up the assembly. We will go back in the spring to re-tighten the joins, smooth the area, fill the sand box, and install the second slide which goes where Mike Soper is sitting.

-- submitted by Dennis Fowler (Transportation Planning)

#### YES THERE IS A SANTA!!

Our St. NIck came in the form of 6 State Employees and friends of Glenn Duffin who worked for the Department of mapping and planning. Along with the gracious contributions of the Department of Transportation from a bake sale they purchased a huge cedar playcenter to surprise the 3 children of Glenn and Pat for a Christmas present. The playcenter is the ultimate WOW gift any child would be happy with.

I know Glenn would be pleased as I am to have friends so caring and willing to work in the cold to build the center for the children. Our many thanks to all at the Department of Transportation, our appreciation and gratitude to the 6 Santa's who built the center without complaint of cold and wind.

Our thanks again for their continued presence in our lives and restoring my belief in the magic of Christmas and yes, Santa!! Thank you Dennis, Bruce, Mike, Wayne, Jim and Ed.

Sincerely,

Pat, Samantha, Heather, and Christopher



### Interstate 93 Selected New Hampshire's Top Transportation Project of 20th Century

A national construction industry association has chosen Interstate 93 as the "Top Transportation Infrastructure Project of the 20th Century in New Hampshire."

The selection by the American Road & Transportation Builders Association (ARTBA) resulted from a national survey to identify the top transportation projects of the past century in all 50 states.

Interstate 93 was recognized for its importance to New Hampshire's economy and mobility.

"I-93 could be called the 'main street' of New Hampshire, stretching 142 miles from the southern border of the state northward to a Connecticut River crossing into Vermont," an ARTBA news release says.

"It serves as an economic lifeline to the major cities of Manchester and Concord, as well as to New Hampshire's Lakes and White Mountains Regions."

The transportation construction industry represented by the ARTBA generates \$200 billion in U.S. economic activity annually and is responsible for the employment of 2.5 million Americans.



Planning continues for the widening of 19.8 miles of I-93 between the Massachusetts border in Salem and Manchester.

Public hearings were held in November for the proposed \$420 million project, which is aimed at relieving congestion and improving motorist safety. The above photo, looking northbound at Exit 1, shows some of the 110,000 vehicles that use I-93 daily in the Salem area. That section of interstate highway was designed and built in the early 1960's to carry up to 60,000 to 70,000 vehicles per day.

#### Bemis Bridge In Harts Location Wins National Timber Bridge Award



With the national award-winning Bemis pedestrian bridge, the bridge design firm H.E. Bergeron Engineers of Conway, NH met the challenge of designing an "unobstrusive span with environmental appeal, low maintenance, not impeding the spring runoff and within a limited budget."

The first place finisher in the "pedestrian" category of the 2002 National Timber Bridge Awards Program spans the Saco River in Crawford Notch.

The Bemis Bridge near US Route 302 connects some homes in Harts Location to the outside world.

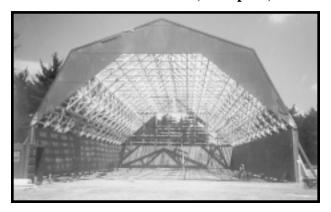
The 165-foot asymmetrical cablestayed bridge has no piers to impede spring runoff. It is handicapped accessible with a five-foot width, which is enough space for a wheelchair to turn around.

Basic materials include glued laminated timber girders and deck, galvanized steel pipe rail, a 53-foot steel tower and galvanized cable.

Funding for the \$210,000 project was made possible by a NHDOT Scenic and Cultural Byways grant.



#### New Salt Sheds in Hooksett, Hampton, Moultonborough and Wentworth Aid Winter Maintenance





The NHDOT continues to upgrade its salt storage facilities across the state, with stronger and bigger structures that can protect extensive salt supplies from the elements. The above photos show the construction and completed high-arch gambrel salt shed being utilized by the Turnpikes Bureau in Hooksett. Similar structures have recently been completed and are in operation in Hampton and Moultonborough. The new Wentworth shed is the first NHDOT facility constructed with concrete.

#### Public Works

#### Construction Underway on New Carroll County Courthouse

By October 2003, residents of Carroll County will have a brand new county courthouse. Construction is well underway on the \$4.5 million, 34,000 square foot project.

Pictured right at the groundbreaking are: (from left to right) Keith Hemmingway, Architect; Donald Hill, Commissioner, Administrative Services; Rep. Betsey Patten, Moultonborough; Speaker of the House Gene Chandler; David Brock, Chief Justice, NH Supreme Court; Andre Canton, Superintendent, Hutter Construction; David Lage, Project Manager, Hutter Construction; and Dana Abbott, Project Manager, NHDOT Bureau of Public Works.



#### Highway Maintenance Debuts New Pollution Education Model At NH State Fairs



The new interactive pollution model proved popular with visitors of all ages at five state fairs this past fall.

New this year at the NHDOT state fair displays was an interactive pollution model that demonstrates how non-point pollution can affect a community's environment.

Designed and built in-house by Highway Maintenance Administrator Steve Gray and Highway Maintenance personnel, the model allows participants the opportunity to observe how pollutants from fertilizers, oil spills, animal wastes and pesticides can enter and adversely affect a community's eco-system.

The 8-foot by 4-foot model represents the area around I-93 in Concord. Colored water and tablets that dissolve when wet were used to depict pollutants that then run off and enter wells, the Merrimack River or highway drainage systems.



# State Fair Goers Say The Darndest Things About Transportation

Editor's note: For the sixth straight year, the NHDOT was represented at several New Hampshire State Fairs. This now established tradition that serves as an opportunity to both promote the agency and to gather feedback from the public we serve through surveys and comments. Listed below are some unedited comments received at the Lancaster, North Haverhill, Cheshire, Hopkinton and Deerfield State Fairs. Overall, 94% of those surveyed at the fairs in 2002 say they have a favorable opinion of the NHDOT.

- Glad to hear you are doing something about road paint.
- Expand mass transit. Need more trains.
- Convert rail lines to bicycle trails like Cape Cod.
- Enforce carpools -- make it a law!
- Roadside mowing -- every other year.
- Moose crossing sign needs to have a picture.
- The idea of a roundabout in Keene is crazy.
- Build new roads from Tilton/Franklin to Laconia.
- Thanks for making our roads and bridges safe.
- Improve Route 101 from Manchester to Keene.
- Give more money to state workers please.
- Believe it or not, towns exist above Plymouth.
- Construct new Manchester Airport Access Road.



**Hopkinton Fair 2002** 

- Look at Chicago Great public transportation system! Trains to Boston, stops in cities every 15-20 miles.
- I like the way New Hampshire fixes their roads before they fall apart -- unlike Mass.
- Please make your crosswalk signs more durable, and don't put them where trucks can run them over.
- Not on 10-year plan, Rt.104 Exit 23 to Meredith. Supposed to be 4 lanes 15 year ago. What's the story?
- When repairing bridges do we really need to work on 10 bridges in a row on the same highway?
- Thank you for the Hillsborough Bypass! Nobody want to drive through Hillsborough if they can help it.
- New Hamphire's highways are exceptionally well maintained. My only criticism is too much salt in winter.
- I wish the Concord toll could be discontinued. Move it to the border of Massachusetts!
- Add lanes to existing roads in the southern part of the state.
- DOT should maintain existing roads but not build new ones. New roads increase sprawl and ruin our state.
- It's already great, just toss a few people out of southern New Hampshire.
- Mowing and trash pickup could be done by state inmates (prisoners).
- Should put in a 2-foot bike path on each side of any road being fixed so it will be safer for them and trucks.
- Please alter General Sullivan Bridge--congestion is horrendous! Needs more lanes.
- I think the DOT has a good method of inspecting bridges. However, there are too many on the Red List.
- I was really impressed with the pollution model. I'd love to see more local awareness statewide.
- Do not add unused areas beside the road. The expense is large and payback is small.
- It's nice to see the Highway Maintainers with more personal protective equipment today than before.
- Don't widen roads if you don't want people to go fast. The flowers on Route 101 look beautiful.
- Many lights won't change with motorcycles (Laconia area).
- Resurfacing roads to make them smoother is great. Much better on our cars.
- Spend less on planting trees and more on poison ivy control.
- Get rid of bridges that are still standing that are not in use.
- NHDOT units need to pay more attention to peak traffic hours when planning lane closings.
- Too many trucks scraping an inch of slush. Realize that flatlanders complain if roads aren't bare.
- State should post on their website how the average citizen can buy the wilflower mix in median strips.
- You need to keep NH a scenic, environmentally sound state. Many things can be done with existing roads.

### DEPARTMENT OF TRANSPORTATION



# **LETTERS**

October 22, 2002

To whom it may concern about the Rest Area at Moore Dam (Littleton) on Interstate 93:

I would like to recommend or compliment Mrs. Kay McGoff for the excellent job she does at the rest area.

She helps disabled people and she is a friendly and pleasant lady. She keeps the rest area very clean. She always has time to help everyone on directions. When a person she knows is ill, she sends a get-well card.

She is good for Littleton plus New Hampshire. Thank you for having such a special lady.

Mr. and Mrs. Raymond Goodwin Lyndonville, VT

Editor's note: Kay McGoff is an Information Center Attendant for District 1 at the I-93 Rest Area in Littleton.

October 23, 2002

This is to simply say "thank you" for providing my wife and myself a safe haven from some car problems on October 11.

We were on our way to Bartlett and had planned to spend the night in a motel somewhere along the way. However, due to problems with our diesel engine glow plugs, the engine could not get cold.

What to do? We came upon a rest area (Seabrook) on I-95 that was clean and well patrolled...and the next day the man on duty helped us find parts for the car.

Thank you so much for everything...and I must score one for Yankee hospitality!

Hugh Beam Ellijay, Georgia



#### Foxfire Property Management, Inc.

October 16, 2002

I am writing to bring to your attention the outstanding service and tremendous professional attitude by Richard Douglas and Ted Rowland. A couple of months ago I was headed east on the road from Portsmouth to Durham. As I crossed the river my car ran out of gas. I was able to coast to the park on the right but was stuck.

I saw Richard and Ted approaching in a DOT vehicle, Without even trying to stop them, they slowed down and asked if there was a problem. I explained my dilemma. I asked for directions to the nearest station. As it was a bit of a hike, they suggested another plan. They used about a half-gallon of gas left in their lawnmower gas tank. They filled up, waited to be sure I got going, and would not accept either payment for the gas or a gratuity.

It was an incredible example of helful, friendly, customeroriented service. Can you imagine this happening on the Mass. Pike? I doubt it. Richard and Ted were friendly and truly helpful when I was in a tough spot. Please extend my thanks to them and please commend them for their attitude of caring and service. You are fortunate to have such good folks.

Steve Duprey Concord, NH

Editor's note: Richard Douglas (Patrol Foreman) and Ted Rowland (Assistant Patrol Foreman) are Turnpikes employees based at the Spaulding Turnpike Patrol Headquarters in Dover.

October 24, 2002

I wanted to express my appreciation to the Chichester DOT Station who gave us a call at home upon finding my daughter's wallet on the side of the road. She lost it approximately 3 weeks ago and it contained her license, credit cards, health insurance card, her checkbook and a little cash.

The DOT workers found her cards laying on the ground and picked up everything they could find. My dauther, Bethany, is a full-time student so this created a chaotic situation for her. The only thing not found was her checkbook, but she had stopped pament on those checks.

Our gratitude to those workers and our thanks to their honesty. Please express our appreciation to this find crew. Thank you.

Terry Lovejoy Concord, NH

Editor's Note: The Chichester #503 Patrol Shed is in District 5.



### District 1 Crew Discovers Oil Truck That Plunged Off Route 16 In Pinkham Notch

An alert NHDOT District 1 crew helped save the life of a heating oil truck driver whose vehicle plunged 200 feet down an embankment on Route 16 in Pinkham Notch on January 20.

Patrol Foreman Ken Crowther and Highway Maintainers Richard Quint and William Dodd were on their way from Jackson to the Pinkham Notch shed when they noticed a big hole in the guardrail at around 6:15 am. They pulled over in the darkness and heard a voice from below.

"We hollered down to the guy and told him we'd be down as soon as we could get there," Richard Quint said in a published report.

Armed with only a flashlight, Quint and Dodd "walked, slid and fell" down the steep slope while Crowther radioed for help. The rescuers found the oil truck driver, 64-year old John Bouchard of Errol, conscious and still alert. They gave him some gloves and stayed with him in the frigid temperatures and waited for emergency rescue personnel to arrive.

Rescuers had to cut off the roof of the truck's cab to free the driver who was taken to a local hospital where he was listed in fair condition.

"He's lucky to be alive," Ken Crowther told the *Union Leader*.



A wrecker hauls an oil truck up an embankment in Jackson after it plunged 150 feet off of Route 16 in Pinkham Notch on January 27. The truck and injured driver were spotted by a NHDOT District 1 crew, who radioed for assistance and slid down the bank to stay with the driver until help arrived. No oil was spilled.

(Photo courtesy Lorna Colquhoun - Union Leader)

He was espcially lucky some observant and caring NHDOT employees spotted him and acted quickly to get him out of a potentially deadly predicament.

#### District 4 Worker Sends His Thanks During Health Leave



Editor's Note: Chester Bigelow Jr., a District 4 Highway Maintainer 2 (#401 Charlestown), recently returned to work after several weeks of health-related leave. This is an edited version of his heartfelt thanks to his fellow employees written while he was still on leave.

I am writing to thank all my friends and co-workers, and especially the 401 crew in Charlestown.

Thanks for the time you donated. Thanks for being there through the whole thing. And I also want to thank Doug Graham, our District Engineer, for coming up with my boss and seeing how I was doing, and sending us a nice letter.

I am proud to be part of the 401 crew...and I think our crew could do just about anything you could think of. Seeing the winter started earlier this year and you are down one man. I'm sorry! I am with you in heart and spirit. May God bless you all.

Chester Bigelow Ir.

January 26, 2003

I want to inform you of the kind assistance my wife and I were given on Dec. 30.

Richard Trempe and his partner noticed our vehicle stalled along the highway. They pulled in behind us, put on flashers to warn on-coming traffic, (and) let my daughter-in-law and grandson sit in the cab until the tow truck was ready to go. They then gave my wife and I a ride back to their station where we could wait in a warm room for my son to arrive and pick us up.

We sincerely appreciated their act of kindness.

Larry & Clare McKibben Gridley, California

Editor's note: The above letter was sent to District 4 Engineer Doug Graham. Richard Trempe is the Highway Patrol Foreman in Temple (#414) and "his partner" is Elmer St. John, a Highway Maintainer 2.







# NHDOT People



James Law was recently recognized for 35 years of NHDOT service by Construction Bureau Administrator Ted Kitsis. Jim has spent nearly all of his career in the Landscaping Section. The Pembroke resident is now in his third year as a Contract Administrator for landscaping contracts for the Bureau of Construction.

# **Baby News!**



Nicole Roy (IT Services) has a new baby girl! Sarah Christine Roy (7 lbs. 13 oz., 21 1/2 " long) was born on 12/13/02. Congratuations Nicole! Two Employees Reach 30 Years in Construction



Two Construction Bureau Contract Administrators were recently recognized for 30 years of State service by District Construction Engineer Karen Gola. Craig Forest (above photo) is currently working on a road and bridge project in Walpole. Tom Edes (below) has been working on the Hillsborough Bypass project.





NHDOT members of the Safety and Environmental Steering Committee received New Hampshire-shaped plaques at the committee's 2002 annual meeting on December 18 in Concord for their efforts in helping to implement the department-wide safety training.



Bruce Crowell (center) was honored by fellow District 6 employees at a retirement luncheon in his honor at the 610 Rye Patrol shed on October 24. Bruce served his entire 30-year NHDOT career at the 610 shed, retiring at the end of October as a Highway Maintainer 2.



### Cathy Carrier Retires After 37 Years Of State Service - 32 With The NHDOT

In her first five years of employment for the State of New Hampshire, Cathy Carrier worked for the Tax Commission, State Personnel, Resources and Economic Development and the Attorney Generals Office.

At her husband's suggestion, she applied for a job at the Highway Department in 1970. She stayed until December 31, 2002. When she arrived at the Morton Building, the Highway Department still shared it with State Police. A few changes have occurred since then.

"The Department of Transportation has been wonderful and good to me," Cathy Carrier said at a retirement reception in her honor on December 30. "I will miss my friends and co-workers."

During her 32-year NHDOT career, Cathy worked in Special Services, Public Works and spent 17 years in Highway Design. For the past 11 years, she has served as Transportation Project Coordinator for the Bureau of Rail and Transit, working primarily as a grants manager.

The Boscawen resident, whose husband Henry works for Highway Design's Survey Section (36 years of service), plans to begin her retirement by caring for her new grandson, Austin.



Proud grandmother Cathy Carrier posed for a family photo with husband Henry (Highway Design) and newborn grandson Austin Brady Carrier at a retirement party in her honor held December 19th in Concord.

Cathy spent 32 of her 37 years of state service with the Department of Transportation, the last 11 in the Bureau of Rail and Transit. Her initial retirement plans will focus on helping to take care of Austin.

### Sky high and not for the meek....



Alan Toshack, a Highway Maintainer at the New Hampton Patrol Shed, climbs and cuts down trees as a side occupation. This photo taken in October shows Alan topping a tree at the home of Dan Gelinas (Bridge Maintenance) in Northwood.

### Plow Drivers Could Use A Little "Relief"



At first glance he appears to be much-needed backup during a long winter, patiently waiting his turn at the wheel of a state snowplow. But a closer look reveals that "Relief Driver, Jr." is nothing more than a stuffed shirt (and pants) with a helmet on, sitting in the back seat of a king cab plow in Highway Maintenance District 2's Canaan 205 Patrol Facility. The companion of Assistant Patrol Foreman Melvin "Butch" Rocke isn't much for conversation, but he never complains or asks for anything!

### NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



# NHDOT Bicycle/Pedestrian Website Recognized

The NHDOT's new online Bicycle Pedestrian Information Center (NHBikePed.com) was recently selected as the "Web Site of

the Week" on the internet site NH.com.

Linked to the NHDOT home web site (www.NHDOT.com), the bike/ped site provides news, maps, safety information for cycling and walking enthusiasts.

According to NH.com, "The site is cheerful and attractive, embellished with graphics that evoke the healthful excitement of the site's mission. The highlight of the site, though is its online collection of bike touring and pedestrian maps."

"Another nice feature of the site is its collection of "featured tours" that provide route details and highlights for a number of New Hampshire rides."

The site was designed by NHDOT webmaster Tom Gilligan.



#### Safety Alert for NHDOT Employees

In recent months, there have been a number of work-related injuries due to falls while exiting vehicles and/or equipment.

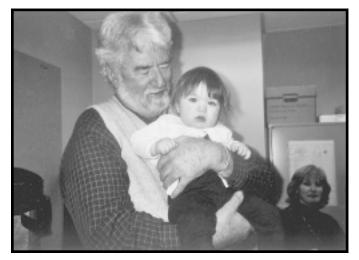
Safe climbing requires the use of both feet and both hands. This means nothing can be carried in the hands while climbing.

To assure the maximum safety from a slip and/or fall, the climber should maintain three points of contact at all times. While one of four extremities is being moved to a new point, the other three should stay in contact with the ladder rungs, handles or steps.

You should never jump down from vehicles or equipment -- descend at a reasonable speed while maintaining three points of contact. Developing this technique as a habit can reduce the risk of a fall by at least half.

This is a simple and effective way to have a positive impact on your personal safety.

# Milestones



Fred Murphy now has more time to spend with his Harley Davidson, his furniture making hobby and most importantly, his granddaughter Elizabeth (pictured above with grampa).

The Special Program Manager with the Bureau of Environment retired in January after 33 years with the NHDOT.

A well-known name, face and voice in the Morton Building for more than three decades, Fred was involved in many different projects in recent years, including the state's Scenic Byway Program. A resident of Hillsborough, Fred Murphy was instrumental in helping to initiate the NHDOT's Environmental Management System.





Ted Lang (above left) and Jim Douthart (both Bridge Maintenance) were recently recognized by Administrator Ed Welch for 25 and 20 years of service, respectively. Ted is a Foreman with bridge crew #2 based in Carroll and Jim is a Bridge Maintainer 3 with paint crew #13B out of Franklin.



2003 Daffodil Days

Spring can't be far off with word that Daffodil Days are coming! This year's NHDOT Daffodil Days to benefit cancer research will be March 27 and 28. Please call Jackie Audet in the Environment Bureau (271-3226) to reserve your bunches.



Rail and Transit

### "Low Floor" Buses Becoming Popular In Transit Services Across New Hampshire

They are already on the roads in Nashua and on the seacoast, and soon passengers using the local bus services in Concord and Hanover-Lebanon will be able to ride them also.

They are "low floor" buses which utilize a ramp instead of stairs or a lift, allowing for much easier and quicker boarding by elderly and disabled passengers.

The entire structure of the low floor buses is lower to the ground, with the majority of the wheels built inside each coach. In addition, a built-in air system allows the bus operator to "kneel" the bus to curb height. The buses are also six inches wider, making it easier for wheelchair passengers to maneuver.

"It is not only great for passengers, it also improves the on-time performance of the bus service because it requires less time to board," says Ken Hazeltine of the Bureau of Rail and Transit.



The NHDOT has begun purchasing "low floor" buses for use by local transit systems across New Hampshire. The \$300,000 buses are easier for elderly and disabled passengers to board and improve service performance due to time savings at each stop.

The Holiday Spirit...





"Santa's helpers" Sharon Caprarello, Marsha Brophy and JoAnn Peterson (Human Resources) were in the holiday mood as they prepared for their Bureau's annual Christmas luncheon.



The Highway Design Bureau's holiday luncheon on Christmas Eve was a family affair. In the above photo, Brian Easler is shown with his wife Stephanie, daughter Colleen and son Dustin. In the right photo David Smith and his wife Stacey are upstaged by their daughter Chloe.





### Roads Once Traveled...





These undated photos from the early 1900's show (left) the "Toll Road within the timber belt on the ascent to Mt. Washington, and (right) the "Toll Road above the timber line on the ascent to Mt. Washington".

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from what appears to be the early to mid-1960's show the pouring of a concrete bridge deck on NH Route 25 in Plymouth. According to the caption accompanying the right photo, "A steady flow of concrete is shown arriving just ahead of the Bidwell finisher from the Belcrete articulating conveyor."